APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/713,121	11/15/2000	William D. Nations	PA-Y0014	3359

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EXAMINER
GELIN, JEAN ALLAND

ART UNIT	PAPER NUMBER
2681	

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Please find below and/or attached an Office communication concerning this application or proceeding.

| Office Action Summary | Application No. 09/713,121 | Applicant(s) NATIONS ET AL. |
| | Examiner Jean A Gelin | Art Unit 2681 |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *13 June 2003* .

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-8,10-17,19-25 and 27-33* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *32 and 33* is/are allowed.

6)☒ Claim(s) *1-8,10-17,19-22,25 and 27-31* is/are rejected.

7)☒ Claim(s) *23 and 24* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

    If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

        1.☐ Certified copies of the priority documents have been received.

        2.☐ Certified copies of the priority documents have been received in Application No. _____ .

        3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

    a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)
2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3)☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4)☐ Interview Summary (PTO-413) Paper No(s). _____ .
5)☐ Notice of Informal Patent Application (PTO-152)
6)☐ Other: .

DETAILED ACTION

1.   This is in response to the Applicant's amendments and arguments filed on June

13, 2003 in which claims 8, 11, and 21 have been amended, claims 32 and 33 have

been added. Claims 1-8, 10-17, 19-25, and 27-33 are currently pending.

Claim Rejections - 35 USC § 103

2.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

3.   Claims 1, 2, 4, 10-17, 19-22, 25, and 27-31 are rejected under 35 U.S.C. 103(a)

as being unpatentable over Yee et al. (US 6,151,497) in view of Palermo (US

6,181,734).

Regarding claims 1, and 25, Yee teaches a data transmission system

comprising: a two-way communication link comprising at least one satellite (i.e., satellite

communication 10) at leas one user terminal having two-way communication with the

two-way communication (i.e., subscriber unit 50, and comprising a memory to collect

data of potential interest to the subscriber, col. 3, lines 33-36); a software which

retrieves information requested by way of the user terminal and information related to

the requested information; and at least one gateway (36) having access to data and

having two-way communication with the two way communication link (fig. 1, lines 13-

22).

Yee does not specifically teach the terminal having a cache for selectively caching data broadcast by way of the satellite of the two-way communication link; a software which retrieves information requested by way of the user terminal and information related to the requested information.

However, the preceding limitations are known in the art of communications. Palermo teaches a terminal having a high-speed memory such as RAM that is used for caching software (col. 5, line 27 to col. 6, line 11). Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to implement the high-speed memory (i.e., cache) taught by Palermo within the system of Yee in order that the operator of the terminal can place waveforms in cache random access memory such that rapid switching between selected waveforms can occur and communicate over different radio networks.

Regarding claim 2, Yee in view of Palermo all the limitations. Yee further teaches the two-way communication link comprises a low bandwidth two-way communication link (i.e., send request to satellite communications system over a low bandwidth message link (56) (col.3 lines 42-50).

Regarding claim 4, Yee in view of Palermo all the limitations. Yee further teaches the two-way communication link comprises a high bandwidth data broadcast link (i.e., the satellite transmits the requested data information to subscriber over high bandwidth link (58) (col. 3, lines 20-22 and col. 3, lines 42-59).

Regarding claims 10 and 27, Yee in view of Palermo all the limitations. Yee further teaches the gateway comprises a cache, (in the spec. page 10, line 11, cache is

storage medium), (i.e., a high capacity storage or memory is in the gateway to collect

information prior to route it to the desired destination, col. 4, lines 19-33).

Regarding claims 11, and 29, Yee teaches a data transmission system

comprising: a two-way communication link comprising at least one satellite (i.e., satellite

communication 10) at leas one user terminal having two-way communication with the

two-way communication (i.e., subscriber unit 50, and comprising a memory to collect

data of potential interest to the subscriber, col. 3, lines 33-36); a software which

retrieves information requested by way of the user terminal and information related to

the requested information; and at least one gateway (36) having access to data and

having two-way communication with the two way communication link (fig. 1, lines 13-

22); generating requests for data at the at least one user terminal (col. 3, lines 8-15);

transmitting the requests for data from the at least one user terminal by way of the two-

way communication link to the at least one gateway (col. 3, lines 8-17);obtaining the

requested data at the at least one gateway (col. 3, lines 8-17); and transmitting the

requested data from the at least one gateway to the at least one user terminal by way of

the two-way communication link (col. 3, lines 8-22 and col. 4, lines 5-25).

Yee does not specifically teach the terminal having a cache for selectively

caching data broadcast by way of the satellite of the two-way communication link; a

software which retrieves information requested by way of the user terminal and

information related to the requested information.

However, the preceding limitations are known in the art of communications.

Palermo teaches a terminal having a high-speed memory such as RAM that is used for

caching software (col. 5, line 27 to col. 6, line 11). Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to implement the high speed memory (i.e., cache) taught by Palermo within the system of Yee in order that the operator of the terminal can place waveforms in cache random access memory such that rapid switching between selected waveforms can occur and communicate over different radio networks.

Regarding claims 12-16, Yee in view of Palermo all the limitations. Yee further teaches transmitting the requests for data comprises transmitting the requests for data by way of low bandwidth communication link, low bandwidth satellite communication link, low bandwidth terrestrial communication link, or low bandwidth wireless communication link (col. 2, lines 42-44, col. 3, lines 9-12, and 44-50).

Regarding claim 17, Yee in view of Palermo all the limitations. Yee further teaches transmitting the requests for data comprises transmitting the requests for data by way of high bandwidth data broadcast link (col. 2, lines 23-26, lines 44-55).

Regarding claims 19, 20, Yee in view of Palermo all the limitations. Yee further teaches obtaining the requested data at the at least one gateway using a user's request history to obtain the requested information (i.e., the gateway is in communication with a billing function to generate data related to specific subscriber unit usage, which reads on the step of obtaining the requested data at the at least one gateway comprises using a user's user profile to obtain the requested information, col. 3, line 65 to col. 4, line 58).

Regarding claim 21, Yee in view of Palermo all the limitations. Yee further teaches obtaining the requested data along with data related to the requested data at

the at least one gateway (col. 4, lines 5-33), and transmitting the requested and related

data from the at least one gateway to the at least one user terminal by way of the two-

way communication link (col. 3, lines 9-22).

Regarding claim 22, Yee in view of Palermo all the limitations. Yee further

teaches storing the requested and related information at the gateway (col. 4, lines 5-45).

Regarding claim 28, Yee in view of Palermo all the limitations. Yee further

teaches terrestrial communication link for transmitting the requested data to the at least

one user terminal in the event that the satellite broadcast link becomes inoperative (i.e.,

gateway notifies subscriber if delays are to be expected from satellite, col. 4, line 64 to

col. 5, line 24).

Regarding claims 30-31, Yee in view of Palermo all the limitations. Palermo

further teaches the cache has a size on the order of 30 gigabytes or multi-gigabyte hard

disk (i.e., inherently present in the high speed memory, cache memory, and hard disk

memory, col. 5, lines 26-67).

4.   Claims 3, 5-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Yee et al. in view of Palermo further in view of Noerpel et al. (US 6,233,451).

Regarding claims 3, 5, and 7, Yee in view of Palermo discloses the system

recited in claims 2 and 4, but fails to teach the two-way communication link comprises a

Ku-band and Ka-band.

However, Ka-band and Ku-band are common in satellite communication. Noerpel

teaches a terrestrial gateway communicates with the satellite over a feeder link

frequency, which can be Ka-band, Ku-band or any band that can be applicable to mobile satellite (col. 3, lines 32-40). Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to implement the Ka-band and Ku-band appropriately, in order to timely implement the satellite system based on already existing technology and government policy in practice.

Regarding claims 6 and 8, Yee in view of Palermo teaches the Ku-band and Ka-band provide a plurality of spot beams that covered selected coverage regions (col. 3, line 32 6to col. 4, line 25).

Allowable Subject Matter

5.   Claims 32 and 33 are allowed.

6.   Claims 23-24 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

7.   The following is an examiner's statement of reasons for allowance: claims 23, 24, 32, and 33 are allowed for the same reason recited in the previous Office Action (Paper # 12).

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

8.   The prior art made of record and not relied upon is considered pertinent to

applicant's disclosure.

Shimomura et al. (US 6,526,580) teaches broadband data broadcasting service.

Bruner et al. (US 6,141,564) teaches method of sharing a SIM card between two

masters.

9.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Jean A Gelin whose telephone number is (703) 305-

4847. The examiner can normally be reached on 9:00 AM to 6:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Dwayne Bost can be reached on (703) 305-4778. The fax phone numbers

for the organization where this application or proceeding is assigned are (703) 872-9314

for regular communications and (703) 872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or

proceeding should be directed to the receptionist whose telephone number is (703) 306-

0377.

JEAN GELIN
PATENT EXAMINER

J.Gelin
August 16, 2003